

Grade 8 Smartie Math

This is a cross strand, multiple outcome formative assessment that would be used at any time in the year as a review or as a great substitute teacher activity.

Outcomes Measured

8.N.3 Demonstrate an understanding of percents greater than or equal to 0%, including greater than 100%.

8.N.4 Demonstrate an understanding of ratio and rate.

7.N.6 (review) Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially and symbolically.

8.SS.3 Determine the surface area of:

- right rectangular prisms
- right triangular prisms
- right cylinders

to solve problems.

8.SS.4 Develop and apply formulas for determining the volume of right rectangular prisms, right triangular prisms and right cylinders.

7.SP.3 (review) Construct, label and interpret circle graphs to solve problems.

Grade 8 Smartie Math

Name: _____

1. What 3 Dimensional shape is your box of smarties?
2. Without taking your box apart, draw a net of your Smartie box.
3. What are the dimensions of your box in cm.
Length:
Width:
Height:
4. Calculate the surface area of your box. Make sure in include units of measure.
5. Calculate the volume of your box. Make sure in include units of measure.
6. Open your box of Smarties, count them and record the total. DO NOT EAT YOUR SMARTIES YET, YOU WILL NEED THEM STILL.
7. Sort your Smarties by color and record each color.
 - Green
 - Yellow
 - Red
 - Blue
 - Pink
 - Brown
 - Purple
8. What fraction of the total Smarties does each color represent?
 - Green
 - Yellow
 - Red
 - Blue
 - Pink
 - Brown
 - Purple
9. What percent does each color represent?
 - Green
 - Yellow

- Red
- Blue
- Pink
- Brown
- Purple

10. What is the ratio of red to blue smarties?

11. If red, pink and purple are positive, and the rest of the colors are negative, what is your total number of Smarties?

11. Use a compass to draw a circle graph to represent your Smarties.

12. Measure the diameter of one Smartie in cm.

13. Measure the height of one Smartie at the thickest part in cm.

14. If you were to construct a tube that all the Smarties would fit in exactly, what would the dimensions of the tube be? What would be the surface area? What would be the volume?

Dimensions

Base:

Height:

Surface area:

Volume:

YOU CAN NOW EAT YOUR SMARTIES!